



**OFFICE OF THE TOWN ADMINISTRATOR
MEMORANDUM**

TO: Each Member of the Board
FROM: Melvin A. Kleckner, Town Administrator
RE: Proposal on Pay As You Throw and Automated Collection of Solid Waste
DATE: May 10, 2016

Next Tuesday evening, a public hearing is scheduled to commence the Board of Selectmen's consideration of changes to the Town's method of collecting solid waste. In anticipation of this hearing, a package of materials is being submitted to you and will be publicly posted. This hearing will also serve as the required public hearing to consider Article 17 of the upcoming Annual Town Meeting, which is a non-binding resolution entitled *Resolution Regarding the Mechanization of Trash Pickup by the Town*.

The Commissioner of Public Works and I formally recommend that the Board of Selectmen adopt a hybrid Pay as You Throw (PAYT) system combined with the semi-automated collection of solid waste, beginning in the spring of 2017. This system creates financial incentives to reduce solid waste disposal through an annual fee system. In this system, a homeowner would be assessed an annual fee for a variable sized container (wheeled cart) for disposal of trash while the disposal of recycled products would remain free and unlimited. If the homeowner is unable to fit their weekly trash within this container, they would need to purchase special overflow trash bags. The Town also commits to having a seasonal amnesty collection day of solid waste two collection days per year that would allow for unrestricted disposal, regardless of amount. Participation in the Town's solid waste collection service is voluntary. Some residents may find that using a private vendor to collect and dispose of their trash is more a cost effective and convenient manner than opting for municipal collection. For those residents who opt for municipal collection but find that the use of wheeled carts presents a burden, the program allows two accommodations. First, the Town will provide the option for a small 18 gallon cart that will be lighter and easier for storage and transport. For households with nobody physically capable of transporting the carts to the curb, an exemption system will be available.

PAYT is considered a best practice for the management of municipal solid waste collection. Over 40% of Massachusetts cities and towns have successfully adopted this system including Newton and Watertown in our immediate area. Given the high costs and the negative financial impacts of trash disposal, PAYT is an essential and proven solution to increase recycling. Not unlike other commodities such as water and electricity, solid waste should be assessed based on volume. The current annual flat fee for solid waste collection is unfair to those citizens who generate less trash and recycle more. With a PAYT system, homeowners who recycle more will pay less for solid waste collection. As part of last year's Tax Override plan, the Town was challenged to reduce expenses. The automation of collection using wheeled carts will save money through reduced labor costs and make it more competitive to keep this service in-house.

The Town of Brookline prides itself on being at the vanguard of public policy and best practices in local government service delivery. The implementation of PAYT, combined with an automated system of curbside collection, is a reasonable and prudent approach to solid waste management. We believe the time has come for Brookline to make this change. We look forward to reviewing the proposal in more details next Tuesday evening. Meanwhile, please find attached a Presentation and an FAQ document that explains the proposed system in more detail.

Semi-Automated PAYT Waste Collection System FAQ's

Q. *Is the Town proposing changes to the curbside collection of solid waste?*

- A. Yes. The Town is proposing to convert the current unlimited trash collection system to a modified Pay-As-You-Throw (PAYT) system. The PAYT system will require residents to place their trash in a variable sized container. The larger the container that is used the more the annual fee will cost. The Town recommends that the container be a wheeled cart in order to facilitate the automated collection of trash. Similar to the collection of recycled material, a truck with the capacity to automatically lift and tip the contents of the carts will be deployed for the collection of trash.

Q. *What are the advantages of "Pay As You Throw"?*

- A. Unlike the current system that assesses a uniform flat rate (\$200/year) regardless of the amount of trash generated, the PAYT system will provide a financial incentive to reduce trash and increase recycling. By reducing trash, the Town saves money by avoiding costly disposal fees. Reducing solid waste also limits the amount of trash that will be buried or burned, creating environmental benefits. Residents who limit their trash will have the opportunity to reduce their annual costs below the current \$200 level.

Q. *Is this a new idea?*

- A. No. PAYT systems are prevalent throughout the United States and the world. Regionally, the communities of Newton, Dedham, Everett, Norwood and Watertown all have curbside collection programs that employ PAYT through the use of carts. The Town of Brookline has been studying PAYT for many years. The first PAYT Committee was created in 2007 and recommended a pre-paid plastic bag system that was rejected by Town Meeting in 2009. A Moderator's Committee on Waste Disposal was convened and met until 2013 when a recommendation was made to change to a semi-automated collection system using variable sized wheeled carts at variable pricing and pre-paid plastic bags for overflow. This was referred to as a "Hybrid PAYT" system. Earlier this year, the Town Administrator convened a Task Force to obtain additional input from residents with differing interests on the implementation of the PAYT program.

Q. *Why Automated Curbside Collection?*

- A. Automated collection allows for the emptying of carts using single person vehicles that employ a mechanical arm. Because of the efficiency of the automated vehicles, the Town can reduce personnel needed for curbside collection and minimize job related injuries. Annual personnel savings would be about \$180,000. Equipment costs will offset this savings for the first six years and by 2022, it is expected that the annual savings for the entire program will be nearly \$300,000. In some areas of Brookline, conventional two person vehicles will still be required where accessibility is difficult.

Q. *What size containers will be available and at what price?*

- A. Residents will have the opportunity to use 18 gallon, 35 gallon, 65 gallon or 96 gallon carts. The larger the cart, the higher the price will be. Below is the proposed annual fee system;
- 18 gallon= \$130
35 gallon= \$180
65 gallon= \$260
96 gallon= \$340

Q. *Some weeks, my trash will not fit within my bin. What are my options?*

- A. The Town will make available for sale at local retail establishments 30 gallon plastic overflow bags imprinted with the Town seal. The use of any other type of bag or container will be prohibited. These bags will be sold in a 5 bag roll for \$15. In addition, the Town intends to have special collection days twice per year that will allow residents to dispose of trash at the curb without the required carts. The Town will continue to collect "bulky items" at the curb (e.g. white goods, air conditioners and TV's) for no cost with advance notice.

Q. *I don't have a place to store my bin and/or I am physically unable to bring the bin to curb. What are my options?*

- A. The availability of 18 gallon carts for residents that have limited storage areas or have difficulty manipulating the larger carts is one option. If a resident can certify that there is nobody living in their household that is physically capable of bringing the cart to the curb, we will allow that household to place their trash in the 30 gallon plastic overflow bags without use of a bin.

Q. *What are next steps and when will this be implemented?*

- A. The Board of Selectmen will convene a public hearing on May 17 at Town Hall to receive input from residents before making final decisions on this system. In addition, a non-binding advisory question has been placed on the Warrant for the Annual Town Meeting commencing on May 24 to provide further public input on the question of exemptions from the requirements to use a bin. It is expected that the new system will be implemented in the Spring of 2017.

Hybrid Pay-As-You-Throw Waste Collection Proposal



Public Hearing - May 17, 2016

**Town of Brookline
Department of Public Works**

What is a Hybrid Pay-As-You-Throw System and What are the Benefits

- **Current system allows the collection of unlimited amounts of trash at a uniform flat rate (\$200 per year)**
- **Pure PAYT systems use custom pre-paid plastic bags for all trash collection**
- **With HPAYT residents are provided with variable sized wheeled carts (one per household) with a variable annual fee determined by the cart size**
- **Custom imprinted plastic bags would be available for purchase at retail establishments throughout the area for “overflow” trash when needed**
- **System provides equity when residents only pay for their own trash volumes**
- **Provides financial incentives to reduce trash and increase recycling allowing Town to reduce trash disposal costs currently at \$72 per ton**
- **Reducing solid waste limits amount of trash that is buried or burned providing environmental benefits**

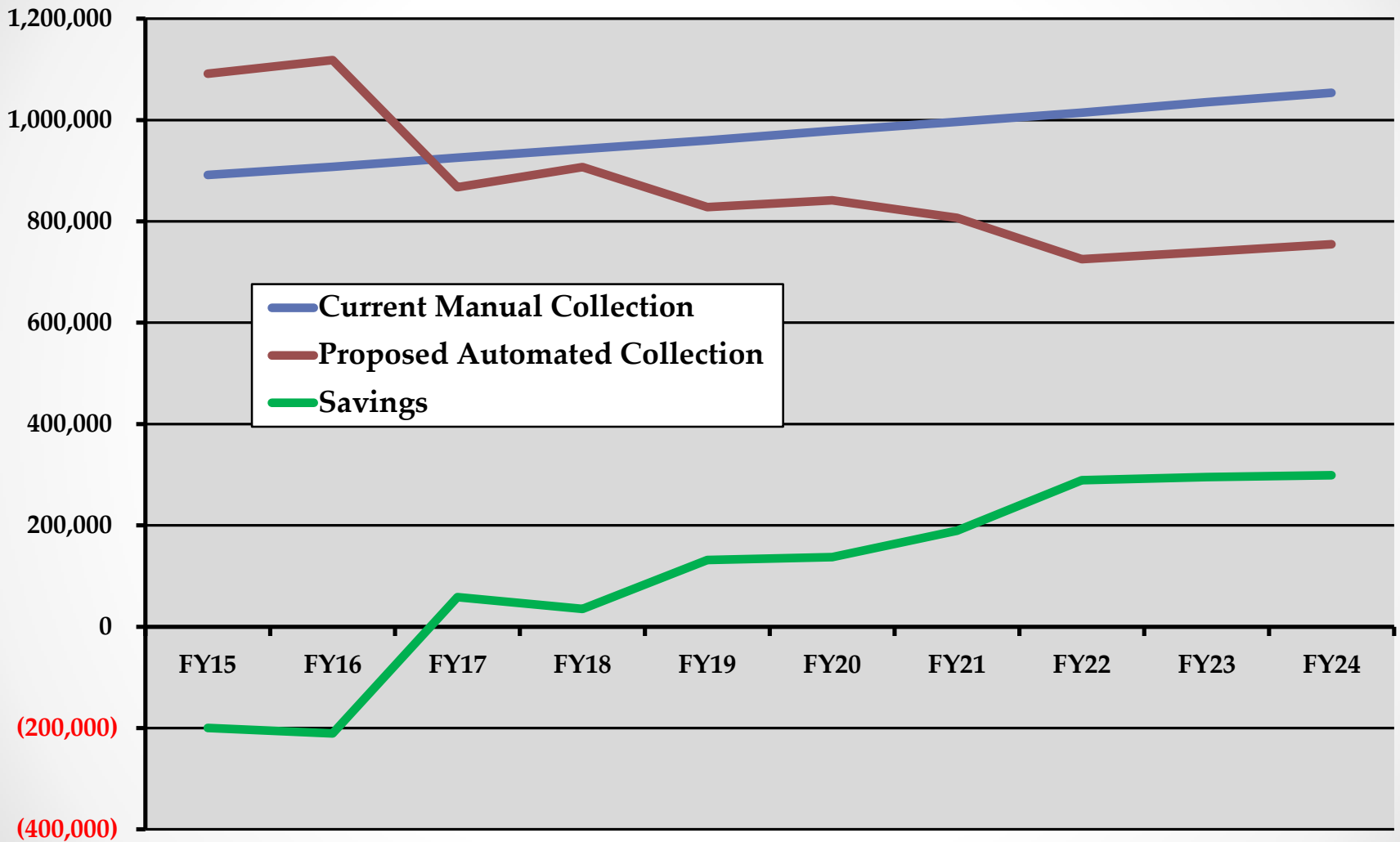
Complying with the Massachusetts DEP Solid Waste Master Plan

- **Current DEP Master Plan requires a 30% reduction in municipal solid waste tonnage by 2020 using 2008 as the base year**
- **Brookline disposed of 11,000 tons of MSW in 2008 and has already achieved a 21% reduction through 2015 at 9,100 tons**
- **To reach our goal, we must reduce an additional 1,400 tons of MSW by 2020 or about 15% below 2015 levels**
- **Trash disposal currently costs \$72 per ton while the processing of blended recycled material is \$19 per ton based on the drop in recycling markets for paper, glass and plastics**
- **At today's market, a reduction of 1,400 tons of MSW will save the Town about \$74,000 per year**

What is Semi-Automated Collection and What are the Benefits

- **Automated collection allows for the emptying of the carts using single person vehicles that employ a mechanical arm operated from the cab of the truck**
- **Semi-automated collection augments the use of side loader trucks with conventional rear loader trucks for picking up carts and bags in areas not accessible by the side loaders**
- **Due to efficiency of vehicles personnel reductions can be achieved through the elimination of 3 laborer positions at an annual savings of about \$180,000**
- **New equipment costs for 2 side loader packers and the wheeled carts will offset a portion of savings for the first 3 years when annual savings will then approach \$300,000 by FY22**
- **Use of automated trucks will reduce the potential for on-the-job injuries and lower worker's compensation claims**

Semi-Automated Collection



- **Baseline maintains current status with 5 – 31 cy packers and 1 – 16 cy standard alley packer for trash collection and assumes the replacement of one vehicle every 3 years**
- **Automated trash collection requires 2 – 32 cy side loader packers, 2 – 32 cy rear loader packers and 1 – 16 cy standard alley packer**
- **Yard Waste and White Metals Collection will continue unchanged from the current system at no additional cost**
- **Bulky Materials Collection will continue at no cost with advance notice**
- **“Amnesty Collections” will be scheduled semi-annually to provide flexibility for residents to dispose of extraordinary trash stored over time**
- **System requires the purchase of 13,200 Wheeled Carts – 35, 65 or 95 Gallon Capacity with 18 Gallon Carts available for Eligible Seniors, Physically Disabled and Households with inadequate storage space for the larger carts**

Wheeled Cart Pricing

Cart Size Gal	MSW Weight lbs	Disposal Cost	Collection Cost	Total Annual Cost	Estimated # of Units	% of Households	Refuse Fee Revenue
18	24	50	80	130	200	1.5%	25,984
35	48	100	80	180	8,100	61.4%	1,456,704
65	87	180	80	260	4,300	32.6%	1,117,656
95	125	260	80	340	400	3.0%	136,000
Bags Only				156	200	1.5%	31,200
					13,200		2,767,544

Overflow Bag Pricing

	Capacity lb	Disposal Costs			Bag Cost	Collection Cost	Total Cost	Recommended Retail Cost
		\$/ton	\$/lb	\$/bag				
30 gallon Plastic Bag	25	72	0.04	1.00	0.35	1.65	\$3.00	\$15.00 per roll (5 bags per roll)

Wheeled Carts



Custom Overflow Bags



Exceptions and Waivers

- **Exception System will be considered that addresses a resident's ability to physically maneuver a wheeled cart from its storage location to curbside on collection day (This would apply to the entire household)**
- **Application for Waiver will be developed and must be completed and submitted by the resident for consideration**
- **Once inspected and approved by DPW, residents will be given the option of using a small 18 gallon wheeled cart or custom imprinted plastic overflow bags available for purchase at local retailers**
- **For households using bags only the DPW will arrange for pickup using conventional collection equipment**

ARTICLE 17

SEVENTEENTH ARTICLE

Submitted by: Harry Friedman

Resolution Regarding the Mechanization of Trash Pickup by the Town

TO SEE IF THE TOWN WILL ADOPT THE FOLLOWING RESOLUTION:

Whereas, the Town, through its Department of Public Works (“DPW”) is seeking efficiencies in the way in which it picks up curbside trash from Brookline residences; and

Whereas, the way in which it is anticipated to effect these efficiencies is by having residents deposit trash in Toter Carts (of a size yet to be determined), similar to those currently used for recycling; and

Whereas, these carts are not designed for use by those who have storage issues, and/or are unable to easily maneuver the carts due to where they will be located and/or because of physical limitations;

THEREFORE, be it resolved, that Town Meeting urges the adoption of an exception system for those residences where the use of the Toter Carts is impractical. This exception system could involve, for example, the use of garbage bags instead of Toter Carts; and

Be it further resolved, that the DPW will make a determination of which residences are entitled to be covered by the exception system, using criteria which shall include, but not be limited to, the following:

- Availability of places in which to store the Toter Carts other than in front of residences, and thus visible from the street
- Ease of getting the Toter Carts from the storage location to and from the curb; and

Be it further resolved, that the exception system will not impose an unfair financial burden on the participants,

Or act on anything relative thereto.

PETITIONER’S ARTICLE DESCRIPTION

Toter Carts are perfectly designed for homes that have outside or garage space in which to store them, which is adjacent to a driveway down which the cart can be easily rolled to the street or curbside. If Brookline were composed of only single-family homes, each with a wide driveway and a garage able to contain at least two cars plus additional storage space, the use of Toter Carts would not be an issue.

However, this is not an accurate description of Brookline. We are not a one-size-fits-all community. My Aspinwall Hill neighborhood has many streets like mine. My street is composed of attached row houses. We have no driveways. We have no accessible backyards. We are three to four-multiunit buildings with limited basement storage. This storage is reached either by interior steps going down into the basement or by exterior steps going from the sidewalk to the basement entrance.

As a result, many residents now store their recycling carts in front of their homes. This is unsightly. Upon entering the street, one is greeted by a sea of blue carts.

Those who currently are able to store the blue carts in their basements have run out of room and are unable to store additional garbage Toter Carts. In addition, the steps one must navigate to get into and out of the basements are a physical impediment for those aging or physically challenged residents, especially given the bulky, weighty, design of the Toter Carts, which makes maneuverability an issue.

Given that we are not a homogeneous housing community, we ask and anticipate that the DPW will devise a system that provides exceptions to the use of Toter Carts. We suggest that DPW do some kind of survey or analysis that will determine which residences can come under this exception.

We also ask that the exception system be fair, from a financial point of view, to the residents covered by it. For example, if we were allowed to continue to use bags, but the Town, due to the introduction of Pay As You Throw ("PAYT"), limited the amount of bags one could put out to the approximate number of bags that could fit in the Toter Cart, we would not expect to be charged an additional fee for being able to use the bags.

SELECTMEN'S RECOMMENDATION

The Selectmen will be voting on Article 17 at their May 17, 2016 meeting. A supplemental report detailing their recommendation will be provided prior to the start of Town Meeting.

ADVISORY COMMITTEE'S RECOMMENDATION

SUMMARY:

By a vote of 22-0-2, the Advisory Committee recommends FAVORABLE ACTION on Article 17, as amended. The Article is a resolution that urges implementation of an exception system for the partially automated and hybrid pay-as-you-throw (PAYT) curbside solid waste pick-up that the Department of Public Works (DPW) plans to implement. Under the proposed method of solid waste pick-up, most waste will be placed

in wheeled toters, similar to the blue toters already used for single-stream recycling, for automated pickup. The resolution would allow exceptions to the use of toters for households for which toters would be impractical or a hardship. The petitioner filed Article 17 to address the difficulties of using toters, which are larger and heavier than regular trash receptacles, by residents who lack adequate storage room, are elderly or physically disabled, or who otherwise would have difficulty bringing toters to curbside from their storage locations.

The Advisory Committee considered Article 17 prior to being informed that the Selectmen will convene a May 17 public hearing to solicit input on the most recent version of the proposal for semi-automated trash collection and PAYT. That proposal will include the fee schedule and exceptions for residents who may experience hardship using toters. The Advisory Committee will monitor any relevant developments and issue a supplemental report to Town Meeting on Article 17 or the DPW budget, if necessary.

BACKGROUND:

Solid waste pick-up has been a topic of discussion and debate in Brookline for years. The main issue in contention has been whether to implement some form of PAYT for the purpose of encouraging reduction in the volume of solid waste disposed of by residents. A PAYT system was proposed to Town Meeting in the 1990s but was withdrawn prior to a vote due to apparent lack of support. In 2008, the Selectmen formed a committee to reconsider PAYT as a means to reduce solid waste. The Committee recommended a bag system that was rejected by Town Meeting in 2009. A Moderator's Committee on Waste Disposal was formed at that time to again reassess PAYT options. In 2013 that Committee proposed a semi-automated collection system in which trucks with mechanical arms would pick up solid waste from variable sized wheeled carts (toters), much as similar trucks now collect recycling from the blue toters. Brookline households would pay trash collection fees based on variable annual pricing, depending on the size of the toter used by the household. The fee would be higher for larger toters. If households could not fit all of their solid waste in a toter, pre-paid plastic bags would be available for disposal of overflow trash. This system has been referred to as a "Hybrid PAYT" system because it is not a pure PAYT system, whereby each household pays for the amount of waste it disposes each week. Earlier this year, the Town Administrator convened a Task Force to obtain additional input from residents with differing interests on the implementation of this type of waste pick-up program.

The DPW has been in the process of planning to implement a semi-automated system for trash pick-up. Originally the system was primarily intended as a cost-saving measure, since automated trash pick-up reduces the amount of manpower needed to only one person per truck. The DPW estimates that three laborer positions could be eliminated under the proposed system. This reduction in labor is projected to reduce the average annual cost of solid waste pick-up by approximately \$100,000 over the next ten years. The amount saved would depend on several factors, including the size(s) of the toters and the number and type of any exceptions allowed. The cost would be greater in the first few years (FY17-FY21) due to the initial cost of leasing new trucks and toters, with increasing savings during the later years. The semi-automated system also would reduce injuries that workers may suffer due to lifting heavy trash bags and barrels.

In an early version of the proposed system, a toter size of 65 gallons was to be the default, because that size was projected to cover the needs of close to 100% of Brookline's population, thereby minimizing the need for extra bags. The proposed program has now been modified to increase toter size options to include a 35 gallon toter, which would provide more of an incentive to limit waste, and a 96 gallon toter, primarily intended for multi-family apartment buildings that would prefer fewer, but larger toters. Different pricing options would be assigned for each size. As a result of public input—including the filing of this Warrant Article, the DPW is now also considering adding the option of an 18 gallon toter that would be easier to store and maneuver, given that toters are heavier and more bulky than regular garbage cans: a 65 gallon toter weighs close to 30 pounds and a 35 gallon toter weighs 20 pounds.

Whereas the proposed plan combines a modified version of PAYT with mechanized trash pick-up, Article 17's proposed exception system would exempt households from the required use of toters, which is integral to mechanized trash pick-up, but would not exempt those households from PAYT. It would offer Brookline residents an alternate way of setting out their solid waste for removal under a PAYT system. The article does not specify the particulars of the exception system, on the assumption that the DPW would be in the best position to determine the best way to carry out the intent of the resolution, such as deciding which households would qualify, what types of receptacles could be placed curbside by those households, and how to determine the cost per unit under PAYT for those households. Three amendments were made to the original article by the petitioner. The first amendment adds guidance as to the types of residences and households that should be considered for exception. The second amendment removes the clause that prohibits "unfair financial burdens" on the excepted properties because of the lack of clarity about the intent of the clause, i.e., that households not using toters should not incur greater costs than those who do use toters. The petitioner decided that it was unnecessary to include that provision since he trusted that the Town would not implement such a policy in any case. The third amendment requires notice provisions and neighborhood meetings to ensure that residents are aware of the upcoming changes.

DISCUSSION:

The petitioner noted that although the current recycling system, which uses toters, has worked well for residents who live in single-family houses, it has not worked so well for residents who live in row houses or other forms of multi-family residences that lack driveways and side yards. While the larger apartment buildings tend to use private trash collectors, smaller multi-family buildings tend to use the Town's services. According to the petitioner, households in these types of residences have had three options for storing and using recycling toters:

- 1) Some households leave the toters in the front yards, which is unsightly.
- 2) Some households keep the toters in the basement, but this requires taking the toters up and down stairs on trash days, which is difficult, given that the toters by themselves weigh up to 30 lbs. and then there is the added weight of the trash. This problem would be compounded for solid waste, which is heavier than recycling materials.
- 3) Some households find themselves in the position of having to put recycling in the regular trash receptacles, since they have no front yards and do not have the

strength to transfer the toters to and from curbside to distant and/or inconvenient storage locations.

The petitioner notes that these issues will be exacerbated with the introduction of toters for solid waste. His view was supported by several residents who attended the subcommittee hearing to testify about the difficulties they and other residents in their buildings have had with the recycling toters. One resident lives in a 3-floor, 12-unit building with no basement and no driveway and very little room on the sidewalk. Especially in the snow, she and the other residents have found it a challenge to set out the 12 recycling toters and still provide room for people to walk. The addition of 12 toters for solid waste would exacerbate this problem. Another resident described how residents of his building currently negotiate solid waste disposal, given that they must use stairs to bring trash to curbside from the basement. Households keep their trash barrels in the basement, with the barrels placed on top of each other. On trash day, they bring the empty barrels to the street and then place the bags of garbage into the barrels. Toters are much heavier and would be difficult, and for some, not physically possible, to bring up and down the stairs. A member of the PAYT Task Force pointed out that many multi-family buildings do not have elevators, so that many residents do not even use trash barrels. Instead, they use bags, which they take curbside. She also noted that recycling toters have been a hardship for some elderly residents of single family homes who find it too hard to maneuver the toters. She noted that a community has the responsibility to be sensitive to residents with diverse needs, which in this case are the elderly and those with physical disabilities.

The petitioner filed Article 17 to make sure that residents who are elderly or disabled and those who live in housing that makes the use of toters burdensome are given an alternate system of waste disposal, which nonetheless would include a PAYT component. He expressed concern that residents had not been notified of the impending changes, so that households for whom such a system will be a burden have not been aware of the hardships of the new system. To address that issue, he amended the article to include a clause to require that notice of the proposed changes be given to all residents.

The Advisory Committee appreciated the concerns highlighted by the petitioner and other residents who testified. When the Commissioner of Public Works was questioned about the cost implications of an exception system, he expressed the belief that the DPW could accommodate some separate trash pick-up for non-toter units without significantly increasing staffing needs. He also noted that he was already considering allowing exceptions, even without the passage of Article 17.

The Advisory Committee supported Article 17, but the resolution may not address all the issues raised by the proposed changes in solid waste collection. The Committee expressed more general concerns about the proposed system. One major concern is that a form of PAYT is being introduced without having been explicitly voted on by Town Meeting, especially in light of the fact that PAYT has twice been rejected by Town Meeting. Also of concern was the possibility of dumping trash in other locations, and of providing some incentive for residents to use their recycling toters for overflow garbage, thereby contaminating them. Another more general question was whether the currently proposed modified system of PAYT would provide enough incentive to reduce waste.

None of these concerns, however, provided any justification for supporting or not supporting the warrant article.

RECOMMENDATION:

By a vote of 22–0–2 the Advisory Committee recommends FAVORABLE ACTION on the following (amendments by deletion are indication in italics; amendments by addition are in boldface):

VOTED: That the Town of Brookline adopt the following resolution:

WHEREAS, the Town, through its Department of Public Works (“DPW”) is seeking efficiencies in the way in which it picks up curbside trash from Brookline residences; and

WHEREAS, the way in which it is anticipated to effect these efficiencies is by having residents deposit trash in Toter Carts (of a size yet to be determined), similar to those currently used for recycling; and

WHEREAS, these carts are not designed for use by those who have storage issues, and/or are unable to easily maneuver the carts due to where they will be located (**example- up or down stairs**) and/or because *[delete: of]* **the person using the cart is elderly or has** physical limitations;

THEREFORE, BE IT RESOLVED, that Town Meeting urges the adoption of an exception system for those residences where the use of the Toter Carts is impractical. This exception system could involve, for example, the use of garbage bags instead of Toter Carts; and

BE IT FURTHER RESOLVED, that the DPW will make a determination of which residences are entitled to be covered by the exception system, using criteria which shall include, but not be limited to, the following:

- Availability of places in which to store the Toter Carts other than in front of residences, and thus visible from the street
- Ease of getting the Toter Carts from the storage location to and from the curb; and

[Delete: Be it further resolved, that the exception system will not impose an unfair financial burden on the participants,]

BE IT FURTHER RESOLVED that at least three months in advance of the implementation of mechanization, mailings informing residents will be sent to all residents on Town trash pickup, and neighborhood meetings shall take place in each neighborhood to publicize and inform residents of the changes in trash pickup.